Walls and other surfaces should conserve light, while avoiding annoying reflections

If offices depend largely on daylight, employees engaged in the visual tasks should be located near windows North light is preferred by draftsmen and artists

Window ventilation is often unsatisfactory compared with comfort ("air") conditioning Persons near windows may feel cold, those farther away may be warm Where there are large interior spaces, forced ventilation is needed, usually, if the space is to be used for office purposes

All mechanical ventilation and air conditioning systems require careful planning and installation by experts Private offices, installed around the outer walls of a large office space should not cut off light and ventilation from the other employees

Fans in offices should be placed where they cannot fall on anybody and they probably should be secured in place

Adequate ventilation should be supplied for duplicating machines, particularly spirit duplicating machines, or others that use ammonia, methanol, or other toxic liquids Concentrations of methanol around poorly ventilated duplicating machines can reach 200-300 ppm If the duplicating processes are confined to a separate small room, this usually means that mechanical ventilation is necessary

Noise in offices should be held to a maximum of 40 decibels at the speech interference levels That is, the average of the reading in the three octave bands between 600 and 4800 Hertz (Hz) (cycles per second) should be less than 40 dB Acually, it is desirable that the noise level not be louder than 35 to 40 decibels (dB) in *any* audible band (16 to 12,000 Hz) Sound-absorging materials should be used on ceilings even where normal noise is not excessive, and noisy machines should be segregated A level of 20 to 30 dB would be classed as a very quiet office, and this level is suitable for a conference room

Electrical. A number of hazards from electrical equipment should be provided against in the layout of the office Electric key switches should be avoided because people try to pick the lock with hair pins or paper clips Dictating machines, electric typewriters, desk lamps, and other equipment require outlets and extension cords arranged to avoid tripping hazards

Where possible, outlets (receptacles) should be installed to eliminate extension cords Cords that are necessary should be clipped to backs of desks or taped down If cords *must* cross the floor, cover them with rubber channels designed for this purpose

Outlets should accomodate 3-wire grounding plugs to prevent electric shock to operators Outlets should only be located under desks to eliminate tripping hazards, but they should also be placed where they will not be accidentally kicked or used as a foot rest As they wear, outlets can become sources of electric shock

Electric equipment in photographic laboratories, particularly, should be grounded because the photographer is close to both water and electricity in the dark room

Materials stored in offices sometimes cause problems also In general, materials should be stored where heavy traffic does not have to be crossed to reach them, and they should be stored where they are not likely to fall on anybody Also, nothing should be allowed on the floor in a passage way where it could be a tripping hazard

Pile materials neatly in stable piles that will not fall over The heaviest and largest pieces should be on the bottom of the pile Where materials are stored on shelves, the heavy objects should be on the lower shelves

Flammable fluids used in offices should be stored in safety cans No smoking should be allowed in areas where flammable fluids are used, such as in duplicating rooms or artists' supply areas

Safe office equipment

A good quality of office furniture not only contributes to the safety of the office but also to its appearance This, in turn, improves the attitudes of both employees and visitors

Chairs, especially, should be comfortable and sturdily built with a wide enough base to prevent easy tipping The casters on swivel chairs should be on at least a 20-in diameter base, and a 22 in base is preferred The casters should be securely fixed to the base of the chair and well constructed be-